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THE CHANGING COMPOSITION OF GROSS FARM INCOME SINCE THE CIVIL WAR

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As a by-product of a research project entitled "*The Changing Balance Between Agriculture and Industry*" conducted by the Bureau of Agricultural Economics and the National Bureau of Economic Research under the Bankhead-Jones research funds, there is now available a long-time record of gross income from farm production in the United States by major commodities, as well as a record of income derived from the domestic and export markets.¹

This record reveals the long-time changing relative importance of the several branches of agriculture as measured by gross income from farm production of individual commodities, and the changing relative importance of the domestic and foreign markets as sources of farm income.

The nature of changes in the relative importance of the major branches of agriculture can be seen from the following data for three selected 5-year periods taken around 1870, 1910 and 1934-37. In the earliest of these periods, wheat supplied about 11 percent of total gross income; in a recent period, less than 6 percent. The respective percentages for hogs are 20 and 12, for cotton and cottonseed 13 and 10. In contrast with these declines the percentage for cattle has remained relatively stable at about 9.5. In very marked contrast are the increases in relative importance of tobacco from 1.4 percent to 3.3, fruits from about 2 to 5, and dairy and poultry products from 16 to 28.

Table 1. Percentage Contribution of Selected Farm Products
to Total Gross Farm Income

| | 1869-1873 | 1909-1913 | 1934-1937* |
|-----------------------|-----------|-----------|------------|
| | percent | percent | percent |
| Wheat | 11.2 | 7.9 | 5.7 |
| Other staple foods | 4.8 | 4.5 | 4.3 |
| Hogs | 20.3 | 13.0 | 12.3 |
| Cattle | 9.5 | 9.4 | 9.7 |
| Sheep and lambs | .5 | 1.1 | 1.2 |
| Cotton and cottonseed | 12.6 | 13.4 | 10.4 |
| Tobacco | 1.4 | 1.7 | 3.3 |
| Fruits | 1.9 | 3.6 | 4.9 |
| Dairy products | 10.2 | 12.5 | 15.9 |
| Chickens | 2.3 | 3.0 | 4.2 |
| Eggs | 2.5 | 6.0 | 7.5 |
| All other | 22.5 | 22.8 | 19.0 |

* 5-year average.

¹ This record was published by the National Bureau of Economic Research, Bulletin 78, April 1940, under the title of "*The Composition of Gross Farm Income Since the Civil War*" by Frederick Strauss.

The relative importance of the domestic market as a source of farm income has varied relatively little during the 60-year period from 1869 to 1929 on the basis of 5-year averages. In each of the 5-year periods of that interval the domestic markets contributed between 81 and 85 percent of the total gross farm income, and the export markets contributed between 15 and 19 percent; but in the more recent years the domestic markets contributed 92 percent and the foreign markets only 8. Leaving out cotton, the domestic markets contributed about 95 percent to total gross income in recent years, and the foreign markets about 5 percent.

Table 2. The Changing Relative Importance of Domestic and Foreign Demand for Farm Products.

| | Percent of Total Gross Income from Production Derived From: | | Percent of Gross Income from Production (excluding Cotton) Derived From: | |
|---------|---|-----------------------|--|-----------------------|
| | <i>Domestic Market</i> | <i>Foreign Market</i> | <i>Domestic Market</i> | <i>Foreign Market</i> |
| 1869-73 | 83.4 | 16.6 | 91.3 | 8.7 |
| 1874-78 | 83.2 | 16.8 | 88.7 | 11.3 |
| 1879-83 | 80.7 | 19.3 | 85.9 | 14.1 |
| 1884-88 | 84.7 | 15.3 | 90.2 | 9.8 |
| 1889-93 | 82.4 | 17.6 | 88.1 | 11.9 |
| 1894-98 | 80.8 | 19.7 | 86.3 | 13.7 |
| 1899-03 | 81.6 | 18.4 | 87.0 | 13.0 |
| 1904-08 | 83.3 | 16.7 | 90.1 | 9.9 |
| 1909-13 | 85.1 | 14.9 | 92.4 | 7.6 |
| 1914-18 | 82.4 | 17.6 | 86.0 | 14.0 |
| 1919-23 | 82.2 | 17.8 | 87.1 | 12.9 |
| 1924-28 | 85.3 | 14.7 | 91.3 | 8.7 |
| 1929-33 | 90.4 | 9.6 | 94.8 | 5.2 |
| 1934-37 | 91.6 | 8.4 | 95.3 | 4.7 |

There is a wide range of difference in the relative importance of the export market for the different farm products. In the case of cotton, the foreign market contributed two-thirds of the gross income up to the first World War; in the 1920's slightly less than 60 percent; and in the recent years about 44 percent.

In the case of tobacco, the export market contributed approximately 76 percent after the Civil War and about 40 percent during the 20 years before the first World War. In recent years the export market has contributed approximately 37 percent.

In the case of wheat, the relative importance of the export market has varied with the cycles in domestic wheat production. The year 1880, 1900 and 1920 mark roughly the high points in the cyclical changes in wheat acreage and production. In these years wheat exports contributed around 35 to 38 percent to gross income from wheat. In the 10 years before the first World War the comparable percentage was around 20 but during the five years 1929-33 the percentage fell to less than 16 and in the next four-year period to less than 8.

In the case of pork and pork products, the relative importance has also varied with the changes in grain production. Around 1870 exports of pork and pork products contributed less than 7 percent to gross income from the production of hogs; around 1880, 18 percent; around 1900, 21 percent; immediately before the first World War 13 percent; around 1920, 21 percent; but in the five-year period 1929-33 less than 7 percent; and for the period 1934-37 less than 3 percent.

Table 3. The Changing Relative Importance of Export Demand
For Selected Farm Products.

| CONTRIBUTION OF EXPORTS TO GROSS INCOME FROM PRODUCTION OF: | | | | |
|---|--------|---------|-------|---------------------------|
| | Cotton | Tobacco | Wheat | Pork and Pork Products |
| 1869-73 | 71.6 | 75.6 | 23.8 | 6.6 |
| 1874-78 | 70.2 | 62.4 | 28.1 | 13.0 |
| 1879-83 | 67.8 | 50.2 | 37.8 | 17.9 |
| 1884-88 | 67.2 | 50.1 | 29.3 | 12.4 |
| 1889-93 | 66.7 | 42.8 | 34.7 | 17.6 |
| 1894-98 | 69.2 | 41.6 | 34.3 | 18.8 |
| 1899-03 | 67.3 | 39.8 | 34.5 | 20.9 |
| 1904-08 | 67.5 | 39.4 | 20.5 | 17.2 |
| 1909-13 | 67.5 | 41.4 | 18.0 | 13.3 |
| 1914-18 | 48.8 | 37.7 | 34.4 | 18.8 |
| 1919-23 | 58.4 | 44.0 | 34.9 | 21.1 |
| 1924-28 | 58.7 | 43.0 | 27.0 | 12.4 |
| 1929-33 | 56.4 | 38.8 | 15.7 | 6.9 |
| 1934-37 | 43.6 | 36.7 | 7.6 | 2.7 |

